What is claimed is:

1. An improved method of diverting a treating fluid in a subterranean zone penetrated by a well bore that comprises interstitial water comprising the steps of:

(a) placing a degradable particulate diverting material comprising a degradable particulate in said subterranean zone which degrades therein over time;

(b) introducing a treating fluid into said subterranean zone which is diverted by the degradable particulate diverting material therein;

(c) introducing a source of releasable water into said subterranean zone which is released upon heating in the subterranean zone; and

(d) allowing the degradable particulate diverting material to at least partially degrade in the presence of the released water in the subterranean zone.

2. The method of claim 1 wherein the treating fluid introduced in accordance with step (b) is selected from the group consisting of water based foams, fresh water, salt water, formation water and various aqueous solutions.

3. The method of claim 2 wherein the treating fluid introduced in accordance with step (b) is selected from the group consisting of aqueous acid solutions, aqueous scale inhibitor material solutions, aqueous water blocking material solutions, aqueous clay stabilizer solutions, aqueous chelating agent solutions, aqueous surfactant solutions and aqueous paraffin removal solutions.

4. The method of claim 1 wherein the source of releasable water comprises a hydrated organic or inorganic compound.

5. A method of claim 4 wherein the hydrated organic or inorganic compound comprises sodium acetate trihydrate, L-tartaric acid disodium salt dihydrate, sodium citrate dihydrate, sodium tetraborate decahydrate, sodium hydrogen phosphate heptahydrate, sodium phosphate dodecahydrate, amylose, starch-based hydrophilic polymers, or cellulose-based hydrophilic polymers.

6. The method of claim 1 wherein the degradable particulate comprises a degradable polymer.

7. The method of claim 6 wherein the degradable polymer comprises a polysaccharide, chitin, chitosan, protein, aliphatic polyester, poly(lactide), poly(glycolide), poly(ε-caprolactone), poly(hydroxybutyrate), poly(anhydride), aliphatic polycarbonate, poly(orthoester), poly(amino acid), poly(ethylene oxide), or a polyphosphazene.

8. An improved method of diverting a treating fluid in a subterranean zone penetrated by a well bore comprising the steps of:

(a) placing a self-degradable particulate diverting material in said subterranean zone which degrades therein over time, the self-degradable particulate diverting material comprising a mixture of a degradable particulate and a hydrated organic or inorganic compound solid;

(b) introducing a treating fluid into the subterranean zone which is diverted by the self-degradable particulate diverting material therein; and

(c) allowing the degradable particulate in said self-degradable particulate diverting material to at least partially degrade in water released by the hydrated organic or inorganic solid compound when heated in the subterranean zone.

9. The method of claim 8 wherein the degradable particulate comprises a degradable polymer.

10. The method of claim 9 wherein the degradable polymer comprises a polysaccharide, chitin, chitosan, protein, aliphatic polyester, poly(lactide), poly(glycolide), poly(ε-carprolactone), poly(hydroxybutyrate), poly(anhydride), aliphatic polycarbonate, poly(orthoester), poly(amino acid); poly(ethylene oxide), or a polyphosphazene.

11. The method of claim 8 wherein the degradable particulate further comprises a plasticizer.

12. The method of claim 8 wherein the degradable particulate comprises poly(lactic acid).

13. The method of claim 8 wherein the degradable material comprises a stereoisomer of a poly(lactide).

14. The method of claim 8 wherein the degradable material comprises poly(phenyllactide).

15. The method of claim 8 wherein the hydrated organic or inorganic solid compound comprises hydrates of organic acids or organic acid salts.

16. The method of claim 15 wherein the hydrafted organic or inorganic solid compound comprises sodium acetate trihydrate, L-tartaric acid disodium salt dihydrate, sodium citrate dihydrate, sodium tetraborate decahydrate, sodium hydrogen phosphate heptahydrate, sodium phosphate dodecahydrate, amylose, starch-based hydrophilic polymers, or cellulose-based hydrophilic polymers.

17. The method of claim 8 wherein the organic or inorganic compound comprises sodium acetate trihydrate and the degradable particulate comprises poly(lactic acid).

18. The method of claim 8 wherein the degradable particulate comprises lactide units, the lactide units and the released water of the organic or inorganic compound being present in the mixture in equal molar amounts.

19. The method of claim 8 wherein the treating fluid introduced in accordance with step (b) is selected from the group consisting of oils, oil-water emulsions, oil based foams, water based foams, fresh water, salt water, formation water and various aqueous solutions.

20. The method of claim 19 wherein the treating fluid is an aqueous treating fluid solution selected from the group consisting of aqueous acid solutions, aqueous scale inhibitor material solutions, aqueous water blocking material solutions, aqueous clay stabilizer solutions, aqueous chelating agent solutions, aqueous surfactant solutions and aqueous paraffin removal solutions.

21. The method of claim 8 wherein the treating fluid is an aqueous acid solution comprising one or more acids selected from the group consisting of hydrochloric acid, hydrofluoric acid, acetic acid, formic acid and other organic acids.

22. The method of claim 21 wherein the acid is a mixture of hydrochloric acid and hydrofluoric acid.

23. The method of claim 8 wherein the treating fluid is an aqueous scale inhibitor material solution comprising one or more scale inhibitor materials selected from the group consisting of tetrasodium ethylenediamine acetate, pentamethylene phosphonate, hexamethylenediamine phosphonate, polyacrylate and mixtures thereof.

24. The method of claim 23 wherein the scale inhibitor material comprises a mixture of tetrasodium ethylenediamine acetate and pentamethylene phosphonate.

25. The method of claim 8 wherein the treating fluid is an aqueous water blocking material solution comprising one or more water blocking materials selected from the group consisting of sodium silicate gels, organic polymers with metal cross-linkers and organic polymers with organic cross-linkers.

26. A method of uniformly introducing a treating fluid into a subterranean zone penetrated by a well bore comprising perforation tunnels formed therein comprising the steps of:

(a) packing a self-degradable particulate diverting material in the perforation tunnels which degrades therein over time, the self-degradable particulate diverting material comprising a mixture of a degradable particulate and a hydrated organic or inorganic compound;

(b) introducing a treating fluid into said subterranean zone by way of said perforation tunnels which is diverted by the self-degradable particulate diverting material therein; and

(c) allowing the degradable particulate in the self-degradable particulate diverting material to at least partially degrade in the water released by the hydrated organic or inorganic compound when heated in said subterranean zone.

27. The method of claim 26 wherein the degradable particulate comprises a degradable polymer.

28. The method of claim 27 wherein the degradable polymer comprises a polysaccharide, chitin, chitosan, protein, aliphatic polyester, poly(lactide), poly(glycolide), poly(ε-carprolactone), poly(hydroxybutyrate), poly(anhydride), aliphatic polycarbonate, poly(orthoester), poly(amino acid); poly(ethylene oxide), or a polyphosphazene.

29. The method of claim 26 wherein the degradable particulate further comprises a plasticizer.

30. The method of claim 26 wherein the degradable particulate comprises poly(lactic acid).

31. The method of claim 26 wherein the degradable material comprises a stereoisomer of a poly(lactide).

32. The method of claim 26 wherein the degradable material comprises poly(phenyllactide).

33. The method of claim 26 wherein the hydrated organic or inorganic solid compound comprises hydrates of organic acids or organic acid salts.

34. The method of claim 33 wherein the hydrated organic or inorganic solid compound comprises sodium acetate trihydrate, L-tartaric acid disodium salt dihydrate, sodium citrate dihydrate, sodium tetraborate decahydrate, sodium hydrogen phosphate heptahydrate, sodium phosphate dodecahydrate, amylose, starch-based hydrophilic polymers, or cellulose-based hydrophilic polymers.

35. The method of claim 26 wherein the organic or inorganic compound comprises sodium acetate trihydrate and the degradable particulate comprises poly(lactic acid).

36. The method of claim 26 wherein the degradable particulate comprises lactide units, the lactide units and the released water of the organic or inorganic compound being present in the mixture in equal molar amounts.

37. The method of claim 26 wherein the treating fluid introduced in accordance with step (b) is selected from the group consisting of oils, oil-water emulsions, oil based foams, water based foams, fresh water, salt water, formation water and various aqueous solutions.

38. The method of claim 37 wherein the treating fluid is an aqueous treating fluid solution selected from the group consisting of aqueous acid solutions, aqueous scale inhibitor material solutions, aqueous water blocking material solutions, aqueous clay stabilizer solutions, aqueous chelating agent solutions, aqueous surfactant solutions and aqueous paraffin removal solutions.

39. The method of claim 26 wherein the treating fluid is an aqueous acid solution comprising one or more acids selected from the group consisting of hydrochloric acid, hydrofluoric acid, acetic acid, formic acid and other organic acids.

40. The method of claim 39 wherein the acid is a mixture of hydrochloric acid and hydrofluoric acid.

41. The method of claim 26 wherein the treating fluid is an aqueous scale inhibitor material solution comprising one or more scale inhibitor materials selected from the group consisting of tetrasodium ethylenediamine acetate, pentamethylene phosphonate, hexamethylenediamine phosphonate, polyacrylate and mixtures thereof.

42. The method of claim 41 wherein the scale inhibitor material comprises a mixture of tetrasodium ethylenediamine acetate and pentamethylene phosphonate.

43. The method of claim 26 wherein the treating fluid is an aqueous water blocking material solution comprising one or more water blocking materials selected from the group consisting of sodium silicate gels, organic polymers with metal cross-linkers and organic polymers with organic cross-linkers.

44. An method of diverting a treating fluid in a subterranean zone penetrated by a well bore comprising the steps of:

(a) placing a self-degradable particulate diverting material in the subterranean zone which degrades therein over time, the self-degradable particulate diverting material comprising a degradable particulate;

(b) introducing a treating fluid into the subterranean zone which is diverted by the self-degradable particulate diverting material therein; and

(c) introducing a source of releasable water into the subterranean zone which is released upon heating in the subterranean zone; and

(d) allowing the degradable particulate to at least partially degrade in the presence of said released water in said subterranean zone.

45. The method of claim 44 wherein the source of releasable water is a hydrated organic or inorganic solid compound selected from the group consisting of sodium acetate trihydrate, L-tartaric acid disodium salt dihydrate, sodium citrate dihydrate, sodium tetraborate decahydrate, sodium hydrogen phosphate heptahydrate, sodium phosphate dodecahydrate, amylose, starch-based hydrophilic polymers, and cellulose-based hydrophilic polymers.

46. The method of claim 45 wherein the organic or inorganic compound is sodium acetate trihydrate.

47. The method of claim 42 wherein the degradable particulate comprises a degradable polymer.

48. The method of claim 47 wherein the degradable polymer comprises a polysaccharide, chitin, chitosan, protein, aliphatic polyester, poly(lactide), poly(glycolide), poly(ε-

carprolactone), poly(hydroxybutyrate), poly(anhydride), aliphatic polycarbonate, poly(orthoester), poly(amino acid); poly(ethylene oxide), or a polyphosphazene.

49. The method of claim 44 wherein the degradable particulate further comprises a plasticizer.

50. The method of claim 44 wherein the degradable particulate comprises poly(lactic acid).

51. The method of claim 44 wherein the degradable material comprises a stereoisomer of a poly(lactide).

52. The method of claim 44 wherein the degradable material comprises poly(phenyllactide).

53. The method of claim 45 wherein the degradable particulate comprises lactide units, the lactide units and the released water of the organic or inorganic compound being present in said mixture in equal molar amounts.

54. The method of claim 44 wherein the treating fluid introduced in accordance with step (b) is selected from the group consisting of oils, oil-water emulsions, oil based foams, water based foams, fresh water, salt water, formation water and various aqueous solutions.

55. The method of claim 44 wherein the treating fluid is an aqueous treating fluid solution selected from the group consisting of aqueous acid solutions, aqueous scale inhibitor material solutions, aqueous water blocking material solutions, aqueous clay stabilizer solutions, aqueous chelating agent solutions, aqueous surfactant solutions and aqueous paraffin removal solutions.

56. The method of claim 44 wherein the treating fluid is an aqueous acid solution comprising one or more acids selected from the group consisting of hydrochloric acid, hydrofluoric acid, acetic acid, formic acid and other organic acids.

57. The method of claim 56 wherein the acid is a mixture of hydrochloric acid and hydrofluoric acid.

58. The method of claim 44 wherein the treating fluid is an aqueous scale inhibitor material solution comprising one or more scale inhibitor materials selected from the group consisting of tetrasodium ethylenediamine acetate, pentamethylene phosphonate, hexamethylenediamine phosphonate, polyacrylate and mixtures thereof.

59. The method of claim 58 wherein the scale inhibitor material comprises a mixture of tetrasodium ethylenediamine acetate and pentamethylene phosphonate.

60. The method of claim 44 wherein the treating fluid is an aqueous water blocking material solution comprising one or more water blocking materials selected from the group consisting of sodium silicate gels, organic polymers with metal cross-linkers and organic polymers with organic cross-linkers.